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COSTS AND BENEFITS OF CSR DISCLOSURE: EVIDENCE FROM THE US

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Abstract

This paper investigates the influences of CSR disclosure on firm's agency cost and performance using agency theory perspective. Analysing the sample of 437 US large firms from 2010 to 2011 with the two-stage least square instrument variable estimation approach, we found that CSR disclosure does not statistically associate with agency cost which was measured by the asset utilisation ratio. CSR disclosure significantly improves firm financial performance in term of both return on asset and return on equity ratio but it does not affect sale performance which is measured by revenue growth. The study results indicate that CSR communication could be an effective tool for efficiency improvement in upstream supply chain activities and thereby enhance firm financial performance but not a fruitful tool for such downstream activities as marketing and sale. The study offers an insight that CSR should be seen as an investment rather than a cost to the firm.

Keywords: Corporate Social Responsibility, Agency Cost, Performance, Disclosure.

INTRODUCTION

The last two decades witnessed a growing attention of both academia and practitioners to corporate social responsibility (CSR). Following the issuance of ISO 26000 on CSR in 2010, most big corporations have prepared annual reports of their CSR practices, voluntarily disclosing their environmental, social and governance information. As corporate responsibilities have increasingly expanded due to heightened stakeholder expectations in a globalized economy, the way in which organizations communicate with their stakeholders through CSR communication has become a subject of intense scrutiny (Crane and Glozer, 2016). In many firms, CEOs make most of the decisions including the ones related to CSR and corporate image (Li et al., 2016). Risi and Wickert's (2017) empirical findings suggest that CSR managers have an important yet ambiguous role to play in the CSR implementation process. This has ignited the debate among scholars about how and why CSR engagement affects firm performance or it is an agency cost enjoyed by managers at the expense of shareholders. Despite a large amount of literature exploring the relationship between CSR engagement and firm performance, a fundamental question "Does CSR really benefit a company or is it an agency cost?" remains unanswered (Li et al., 2016; Hong et al., 2016).

To fill this gap, our paper examines the effect of firm's CSR disclosure on firm's agency cost and performance; these are firm's product market performance reflected by sales growth and firm's financial performance measured by return on assets (ROA) and return on equity (ROE). Using the data of the US large firms from 2010 to 2011, we found that CSR disclosure is neither related to firm's agency cost nor significantly effective on sales growth; however, CSR disclosure is significantly and positively associated with firm's financial performance.

Our paper provides three theoretical contributions. *First*, we contribute to the theoretical debate about the costs and benefits of CSR engagement by providing evidence of positive

effect of CSR disclosure on firm's financial performance while we suggest that CSR engagement is not an agency cost for shareholders. *Second*, we extend the debate on how firms should communicate about their social responsibility initiatives (Lindgreen and Swaen, 2009) to the public by providing empirical evidence to support the view that disclosing CSR information is an investment to the disclosing organisations. *Third*, to our best knowledge, this study is the first that has investigated the influence of CSR disclosure on agency cost. We used the Google Scholar to search for previous studies that look into the effect of CSR disclosure on agency cost; nevertheless, we could not find any. Furthermore, in the latest and comprehensive review of the literature in the field of CSR communication, Crane and Glozer's (2016) findings indicate no existing literature has investigated the influence of CSR disclosure on agency cost.

The remaining sections of the paper are the literature review and development of the hypotheses, the research method, the empirical results and interpretations. The last section concludes the paper and suggests the avenue for future research.

THEORETICAL BACKGROUND AND HYPOTHESES

Agency Cost

Agency theory (Jensen and Meckling, 1976) posits the notion that the separation of ownership and control potentially leads to self-interested actions taken by agents since people are rooted in economic rationality. It is argued that in situations in which there is an interest conflict between the agent and principal, the former is likely to select self-serving actions at the cost of the latter's welfare (Deutsch, 2005). The main issues come from the information asymmetry and interest deviations between the agent and principal.

Jensen and Meckling (1976) view an agency relationship as a contract under which the principal engages the agent to perform some service on their behalf, which involves

delegating the authority of decision making to the agent. Three fundamental behavioural assumptions about the agent and the principal in agency theory are: both of them are (a) rational and (b) self-interested, whereas the former is (c) more risk-averse than the latter (Jensen & Meckling, 1976). The agent typically possesses more or better information than the principal on the decision-making situations, or on the consequences of actions (Ross, 1973). The information asymmetry results in the agency cost of dealing with the principal-agent relationship.

As a person has the propensity to be opportunistic (Cyert and March, 1963), an interest conflict may arise between the agent and principal; consequently, *moral hazard* (Akerlof, 1970) may harm the principal. *Moral hazard* is the concept of unobservable dishonest behaviour, lack of transparency, irresponsibility and undue diligence of one party at the other's expense after the contract has been signed. The essential thing is how to match the interests and goals of the agent and the principal in order that both have benefits and gains.

Moral hazard can be controlled through monitoring and bonding, although there are inevitably residual costs in agency relationships. Thus *agency cost control mechanisms* are the processes, systems, and structures designed and set up for purpose of monitoring and alignment of interests between managers and firm owners. These agency cost and control mechanisms apply to all sources of agency problems (Chrisman *et al.*, 2004).

Most literature on agency cost is conceptual work. Only a handful of studies attempt to empirically examine agency cost. These studies popularly examine agency cost in the relations with the corporate governance structure. Ang *et al.* (2000) used a sample of the US small firms to test the hypotheses on the link between ownership structure and agency cost. While a few papers (McConaughy *et al.*, 2001; Chrisman *et al.*, 2004; Fleming *et al.*, 2005) use the measure of agency cost adopted from Ang *et al.* (2000) for study of small firms, little is known about it in studying big companies except two papers using the data of the US large

firms (see Singh and Davidson III, 2003; Jurkus et al., 2011) and another study using a dataset of the UK large firms (see McKnight and Weir, 2009). Recently, Rashid (2015) empirically investigates the relations between board independence, board size, CEO duality and agency cost. Similarly, Rashid (2016) empirically examines the link between managerial ownership and agency cost. However, there is no research investigating the agency cost in the relation with CSR. In this paper, we will look into how and why disclosure of CSR information influences agency cost and whether this voluntary disclosure contributes towards to firm's performance.

CSR disclosure and agency cost

While CSR definitions vary, it generally refers to actions taken by companies with respect to their employees, communities, and the environment that goes beyond what is legally required of a company (Barnea and Rubin, 2010). Based on Jensen and Meckling's (1976) agency theory, Barnea and Rubin (2010) see CSR engagement as a principal-agent relation between managers and shareholders, and argue that managers have an interest in over-investing in CSR in order to obtain private gains of building reputation as good social citizens, possibly at an expense to firm owners. On the other hand, Jo and Harjoto (2011) provide evidence supporting the opposite view which states that top management engages in CSR to resolve the conflicts among various stakeholders. Despite the ongoing debate among scholars and practitioners regarding these two competing hypotheses, few definitive conclusions can be drawn and the literature remains divided (see Griffin and Mahon, 1997; Orlitzky et al., 2003; Margolis et al., 2009).

The impact of modern economic activities on quality of life has caused growing stakeholders' concerns about environmental and social issues (Raelin and Bondy, 2013). Stakeholder management model (Freeman, 1984) requires the management to pay attention to the

legitimate interests of stakeholders, implicitly and explicitly, both in the establishment of corporate structures and policies and in daily decision making. Stakeholder theorists frame the idea that voluntary disclosure narrows the information asymmetry gap between a firm and its investors. Moreover, businesses are bound by a social contract in which they perform socially-desirable actions to seek for approval about their objectives and other rewards, which ultimately guarantee their continued existence (Suchman, 1995). By disclosing CSR information, a firm can signal their accountability and transparency to shareholders and stakeholders alike, hence more legitimacy and sustainability. These help the firm lessen agency cost.

It is necessary for CEOs to make effort to facilitate the proper counselling and monitoring functions of the directorate system by disseminating information in a timely and appropriate manner to all concerned. While a CEO has a chance to prioritize the fulfilment of legal contracts with firm owners rather than social contracts by passing costs on to society (Raelin and Bondy, 2013), agency theory suggests this chance is reduced when there is more monitoring over the CEO from a board. To facilitate the board monitoring process, shareholders can require the CEO to disclose non-financial information. This is because social and environmental resources are likely to be misused by the firm; both shareholders and stakeholders would then pay costs arising from this misuse.

CSR disclosure aims towards a reduction of information asymmetry between managers and firm owner. CSR disclosure is defined as the communication of the governance, social and environmental impacts resulting from a firm's economic actions on particular interest groups and on society at large (Gray *et al.*, 1996). An agency problem occurs due to information asymmetry, CSR disclosure could mitigate agency cost. This leads to the following hypothesis:

H1: Higher CSR disclosure is likely to result in lower agency cost.

CSR disclosure and firm performance

Among the most common measurements for firm performance are sale performance and financial performance. The effect of CSR on sale performance can be analysed by applying the conventional consumer decision making process model suggested by Nicosia (1966) to understand consumer behaviours toward CSR activities in their decision-making stages.

In the *need recognition stage*, consumer awareness, knowledge and perception of CSR activities may serve as an added advantage for the company (Fatma and Rahman, 2015) and a pre-condition of its benefits, such as a positive response (Sen and Bhattacharya, 2001) and purchase intention (Lee and Shin, 2010). A low level of awareness does not result in positive response to those activities (Pomeroy and Dolnicar, 2009; Auger *et al.*, 2003). Most of the previous studies have shown a positive perception of CSR in the developed nations and depicts that consumers are interested in and aware of CSR of producers and use them as a purchasing criterion (Arli and Lasmono, 2010).

In the *information search and evaluation stage*, previous studies suggest a positive association between CSR activities and consumer attitudes toward the firm (Brown and Dacin, 1997; Creyer and Ross, 1997; Ellen *et al.*, 2006). Generally, consumers have a positive attitude toward companies that engage in CSR activities (Fatma and Rahman, 2015).

In the *purchase stage*, the influence of CSR on consumer purchase behaviour is more complicated and flexible, compared to its effect on their attitudes and beliefs (Sen and Bhattacharya, 2001). Consumers are not willing to compromise on the main attributes of a product, i.e. price and quality (Mohr and Webb, 2005; Gupta and Hodges, 2012). Consumers are more sensitive to “unethical” behaviours compared to “ethical” behaviours; this means that “doing bad” hurts more than “doing good” helps (Sen and Bhattacharya, 2001; Brown

and Dacin, 1997; Fatma and Rahman, 2015). Moreover, competition on product market fosters CSR adoption (Flammer, 2015).

In *post-purchase*, CSR and perceived value have been shown to be important antecedents to customer satisfaction (Fornell, 1992, Smith, 2003; Carvalho et al., 2010). Customers tend to be more satisfied with firms that are socially responsible (Lee and Heo, 2009). Satisfied customers may result in loyalty (Bolton and Drew, 1991), a willingness to pay a higher price (Homburg et al., 2005) and positive word-of-mouth comments (Szymanski and Henard, 2001). Previous empirical findings such as those provided by Lev et al. (2010); Harjoto and Jo (2011) support the positive influence of CSR disclosure on sales and/or sales growth.

As such, CSR disclosure may entice consumers to buy a product or service. As a result, firms may reap a price premium or increase in market share and have good sale performance. Thus, we propose the following hypothesis:

H2: CSR disclosure is positively associated with firm's sale performance.

Apart from sale performance, there are other potential benefits to firm performance that a company has toward the CSR activities. *First*, CSR may help recruit, motivate, and retain good employees. For example, Timberland notes that its provision of paid time off for employees to volunteer for social causes helps to “attract and retain valuable talent” (Sprinkle and Maines, 2010). Murray (2007) claims that “people are seeking the meaning at work... and, it has become clear that staff motivation is a powerful bottom-line benefit of corporate responsibility”. De Roeck et al.'s (2016) findings from a longitudinal study suggest the long-term impact of employees' perceptions of CSR on their willingness to feel a stronger sense of belongingness to or oneness with their organization. Meanwhile, employee engagement is the key to improving firm performance (Kompaso and Sridevi, 2010).

Second, companies' focus on environmental issues can lead to reductions in production costs. For example, Wal-Mart reduced transportation costs by \$3.5 million through an initiative to

reduce packaging on toys in 2006 while Ecology and Environment reported the efficiency gains resulting from these measures which accrued an estimated net savings of approximately \$232,000 from 1999 to 2008 (Sprinkle and Maines, 2010). Earlier, McGuire et al. (1988) noted that there was a significant positive correlation between CSR and ROA; firms with positive CSR may find that they have more low-cost implicit claims than other firms. Therefore, investments in CSR have a big return in terms of financial results; the related benefits are found to be bigger than the related costs.

Third, CSR also may reduce the possibility of untoward incidents occurring, which in turn reduces the likelihood of lawsuits and negative effect on the firm's reputation. CSR might help manage such risks by ensuring that reputable and sustainable business practices are being followed throughout the supply chain that might otherwise harm future profits of the firm (Sprinkle and Maines, 2010).

Finally, firms engaging in CSR are more likely to attract capital from investors and receive more favourable terms from creditors because many individuals likely wish to align their investment dollars with their moral aims (Sprinkle and Maines, 2010). As such, CSR activities which are reflected by CSR disclosure enable a firm to create more output as a result from more engaged and talented workforce, to reduce production and supply chain risk cost and obtain more investment, thereby its financial performance will improve. Thus, we propose a hypothesis as followed:

H3: CSR disclosure is positively associated with firm's financial performance.

RESEARCH METHOD

Empirical models

To test our hypotheses, we developed two empirical models in which CSR disclosure is the key independent variable while either agency cost (proxied by assets utilisation ratio - AUR) or firm performance is the dependent variable. We controlled for the proportion of

independent directors, firm leverage, market value and the number of employees which are popularly used as control variables in corporate governance literature.

$$\text{Equation 1 } Agencycost_{it} = \beta_0 + \beta_1(csr_disclose)_{it} + \beta_2(in_director)_{it} + \beta_3(leverage)_{it} + \beta_4(market_value)_{it} + \beta_5(employee_no)_{it} + \epsilon_{it}$$

$$\text{Equation 2 } Performance_{it} = \beta_0 + \beta_1(csr_disclose)_{it} + \beta_2(in_director)_{it} + \beta_3(leverage)_{it} + \beta_4(market_value)_{it} + \beta_5(employee_no)_{it} + \epsilon_{it}$$

Where

Dependent variable:

To measure agency cost, we used assets utilisation ratio (AUR) to proxy agency cost. Ang *et al.* (2000) was the first literature which has initiated the relative measure of agency cost for companies as AUR calculated by annual turnover divided by annual total assets of a firm. AUR demonstrates the efficiency of using a unit of company assets to generate sales, which reflects “the loss in revenues attributable to inefficient asset utilization, which can result from poor investment decisions or from management’s shirking (e.g., exerting too little effort to help generate revenue)”. AUR reflects the effectiveness of firm investment decisions and the ability of the management to direct assets to the most productive use. Firms with lower AUR are inferred making non-optimal investment decisions or using funds to purchase unproductive, i.e. non-revenue-generating assets, thereby creating agency cost for shareholders (Henry, 2010). AUR thereby indicates the quality of management since lower efficiency can also be viewed as a proxy for higher agency cost, other things being equal (McConaughy *et al.*, 2001). AUR has also been widely used as a proxy for agency cost in other studies (Ang *et al.*, 2000; Singh and Davidson III, 2003; Fleming *et al.*, 2005; Florackis, 2008; McKnight and Weir, 2009; Rashid, 2015; Rashid, 2016).

Underpinned by the Ang *et al.* (2000), our study employed AUR as the relative measure of agency cost although there are two more indicators which some studies also used to measure

agency cost. These are: (i) the expense ratio (ER) which is the ratio of operating expenses (selling, general, and administrative expenses, excluding financing expenses and any non-recurring expenses, such as losses on the sale of assets) to total annual sales (see Ang et al. 2000); (ii) the ‘Q-free cash flow interaction’ ($Q*FCF$) which is the interaction of company’s growth opportunities with its free cash flows (see Rashid, 2016). The reason for our use of AUR is because it is the more widely accepted as the proxy for agency cost in previous literature than the other two (see Rashid, 2015; 2016).

To quantify firm performance, we used the absolute values of performance measures, such as profitability and sales growth (Chakravarthy, 1986; Cronin and Page, 1988; Greenley, 1995). Annual sales growth (*sales_growth*) was calculated by sales of a year divided by sales of the previous year. Similar to Rashid (2015) and Rashid (2016), we measured profitability with annual ROE and ROA. Although some studies (i.e Rashid, 2015; Rashid, 2016) used Tobin’s Q as a financial market performance measure, this indicator is not relevant to our study as we looked into the sales and accounting measures rather than financial market performance measures.

Key independent variable:

CSR disclosure (*csr_disclose*) is calculated on the amount of environmental, social and governance (ESG) information that a company disclosed. This score was measured by Proprietary Bloomberg ESG group and used in the previous studies such as Aragón-Correa *et al.* (2016) and Lai *et al.* (2016).

ESG disclosure scores were measured in terms of the degree of transparency of a company’s reporting on ESG metrics (Lai *et al.*, 2016). Although ESG disclosure scores are not specifically a performance metric, the scores demonstrate the degree to which a company reports non-financial information.

The scores range from 0.1 for companies that disclosed a minimum amount of data to 100 for those that disclosed every data point. Each data point is weighted in terms of importance, with environmental data carrying a greater weight than other disclosures in EGS, greenhouse gas emission carrying greater weight than other environmental disclosures in E, and workforce data carrying greater weight than other social disclosures in S. Companies that are not covered by the Proprietary Bloomberg ESG group and companies that do not disclose anything will have no score. The scores were also tailored to different industries; in this way, each company was evaluated in terms of the data relevant to its industrial sector.

Control variable:

We used four variables for control in which:

We controlled the composition of directors (*in_director*) (Singh and Davidson III, 2003) or board independence in the other words (Rashid, 2015).

Firm leverage (*leverage*) was controlled in the model (Ang *et al.*, 2000; Singh and Davidson III, 2003; Henry, 2010). The use of debt financing is expected to have a positive incentive effect on firm managers and reduce agency costs due to the adverse consequences associated with defaulting on debt obligations. Consequently, banks require a strategic business plan before they lend money to firms. Debt finance provides an alternative and/or complementary control mechanism to managerial equity ownership and family ownership for reducing agency costs of a firm (Seetharaman *et al.*, 2001).

Firm size was proxied by market value (*market_value*) (Singh and Davidson III, 2003) and employee number (*emp_nu*).

Instrument variable for the key explanatory variable:

Environmental disclosure score (*envi_disclose*), social disclosure score (*social_disclose*) and governance disclosure score (*gov_disclose*) were used as the three instrument variables for *csr_disclose* in the regressions due to the fact that *csr_disclose* was compiled from

environmental, social and governance information a firm disclosed as described in Bloomberg.

The variables and measures are presented in Table 1.

(Insert Table 1 about here)

Context

To investigate the influences of CSR disclosure on firm's agency cost and performance, we decided to use the context of large firms from the US. The reason for choosing the US is that the US is often seen as being the paradigmatic case of the shareholder-oriented or market-based model to corporate governance, and described in terms of several interrelated elements: activist institutional investors, an open market for corporate control, independent outside directors on the board, long-term equity-based compensation for executives, and gatekeepers who monitor the process of market disclosure (Jackson, 2010).

The other reason for our usage of large firm data is attributed to Jensen and Meckling's (1976) seminal paper hypothesizing that the more separation of ownership and control, i.e. in the situation the larger a firm becomes, the higher its agency costs incur due to the increased monitoring cost and bonding cost necessary for large firms. The further reason that we used large companies in the US for testing the hypotheses is that we aim to extend the Ang *et al.* (2000)'s work which rely on data of small American companies.

All of the firms in the dataset are listed on the New York Stock Exchange. The most common industries in the dataset are electric, medical, bank, oil and gas, retail, manufacturing, food, financial and commercial service, insurance, aerospace, transportation, building and constructions, chemical and steel production.

Data

First, the names of the US leading firms were collected from the Fortune website released between March 2011 and March 2012. *After that*, we manually collect the ISIN code or a

Bloomberg ticker for each firm. We made sure that the dataset was narrowed down to the active public companies. *Next*, annual data on turnover, total assets, environmental disclosure score, social disclosure score, governance disclosure score and the combined environmental-social-governance disclosure score (ESG), the percentage of independent directors on board, return on equity, return on assets, sales growth, debt-to-equity ratio, market value, number of employees and industry sectors from 2010 to 2011 were automatically collected from Bloomberg.

The final dataset includes 726 firm-year observations from 437 US firms in 167 industry sectors as classified by Bloomberg. This is an unbalanced dataset. Due to the missing data for some of the variables, the number of observations used in the modelling was marginally reduced.

Estimation Strategy

Sensitivity analysis

First, we checked multicollinearity problem by examining correlation coefficients among predictors and their Variance Inflation Factor (VIF). As shown in Table 2, all of the VIFs are smaller than 10, suggesting that multicollinearity is not a problem with our dataset (Mansfield & Helms, 1982).

(Insert Table 2 about here)

Second, we examined the potential endogeneity of our independent variable. This variable is endogenous when it is correlated with the error term of a model (Wooldridge, 2013) or when a loop of causality between the independent and dependent variables of a model exists (Jia and Skaperdas, 2012). We run the regressions on *csr_disclose* using *AUR* [*sales_growth*] [*roe*] [*roa*] alternatively as the independent variable. The P value obtained from the regression results is small ($P < 0.05$), so endogeneity is an issue in our models.

Estimation method

To deal with the endogeneity problem of the predictor, we used Instrumental Variable Two-Stage Least Square regression method as suggested by Wooldridge (2013). Social disclosure score (*social_disclose*) and Governance disclosure score (*gov_disclose*) were used as the instrument variables for *csr_disclose* in the regression on *AUR* (see Model 1 in Table 3).

Environment disclosure score (*envi_disclose*), Social disclosure score (*social_disclose*), and Governance disclosure score (*gov_disclose*) were used as the instrument variables for *csr_disclose* in the regression on *sales_growth* [*roe*] [*roa*] (see Models 2, 3, 4 in Table 3).

(Insert Table 3 about here)

Robustness check

To make sure that our findings are robust, we conducted several tests as suggested by Wooldridge (2013). The P value from the Wu-Hausman F test and Durbin-Wu-Hausman chi-sq test of endogeneity of *csr_disclose* (P=0.29 in Model 1; P=0.33 in Model 2; P=0.50 in Model 3; P=0.76 in Model 4) show that the hypothesis of exogenous regressor cannot be rejected. Thus, endogeneity issue of our models was addressed.

The first-stage regression summary statistics demonstrate that P =0.00 on both of the models, thereby suggesting the instrument variables used are not weak.

For the tests of overidentifying restrictions, both of the Sargan (score) chi2 and the Basman chi2 have large P value (P=0.23 in Model 1; P=0.56 in Model 2; P=0.58 in Model 3; P=0.50 in Model 4) indicating that the instrument variables used are valid. Thus, the estimation method and the results produced are robust.

RESULTS

The descriptive statistics of our dataset is presented in Table 2. The average size of a firm in our dataset is the one with 54,565 employees. The smallest has 230 staff while the biggest firm has 2,100,000 employees. The average CSR disclosure score is 26.48 percent. The

average value of sale growth is 9.96 percent while ROE and ROA are respectively 18.30 and 6.15 percent on average.

Table 3 displays the results obtained from 2SLS regression of Equations (1) and (2). As can be seen, CSR disclosure is not significantly associated with AUR; therefore, H1 is not confirmed. Similarly, CSR disclosure has no significant effect on sales growth; therefore, H2 is not confirmed.

However, H3 is confirmed at 99% confidence interval as the statistically significant and positive effect of CSR disclosure on ROA ($p=0.00$; $\beta=0.07$). H3 is further confirmed at 90% significance level as our results show the statistically significant and positive effect of CSR disclosure on ROE ($P=0.08$; $\beta=0.20$).

DISCUSSIONS AND CONCLUSION

Hong et al. (2016) suggest that socially responsible activities of a firm are more likely to be beneficial to shareholders, as opposed to agency costs. However, the disclosure of CSR information at the same time might cause more divergent interests, thereby increasing agency problems and the consequent higher agency costs. There is a significant amount of literature suggesting firm's social engagement as an inefficient use of resources. For example, the shareholder theory (Friedman, 1962) views CSR as an unnecessary cost of doing business. Accordingly, addressing social issues reduces firm profits and is akin to a transfer of benefits from shareholders to stakeholders. A similar argument is made, e.g., in Elhauge (2005) that, CSR policies involve "sacrificing corporate profits in the public interest". Barnea and Rubin (2010) support the counter argument that disclosure of CSR information is likely to be greenwashing or corporate imaging, which are interest diversions to the shareholder value. Overall, more CSR disclosure for the purpose of building glossy image tends to incur more costs spent on stakeholders on the firm owner's expenses, resulting in higher agency costs. Nevertheless, our test result demonstrating the statistically insignificant effect of CSR disclosure on assets utilization, proxied for agency cost, does not support these arguments.

Although our result shows the statistically insignificant effect of CSR disclosure on sales growth, the negative sign presents a tendency for a negative association between CSR disclosure and sales growth, implying that consumers are, somewhat, sceptical about CSR activities of a firm. Firm's sale performance tends to decrease when the firm discloses more about its CSR activities. This is possible because consumers see the CSR activities which companies are engaging in as "window dressing" (Fatma and Rahman, 2015). In fact, Porter and Kramer (2006, p. 80) claim that "the most common corporate responses have been neither strategic nor operational but cosmetic".

For financial performance, it is important to note that the CSR-financial performance relationship represents a proliferation of approaches which are controversial, complex and unclear (Garriga and Mele, 2004). Earlier, a mixture of positive and negative effects have been found in the relationship between CSR and profitability (Margolis and Walsh, 2003). Jones (2004) indicates that the difficulty in identifying and quantifying CSR lies in the fact that CSR involves not only spending but also the ethical behaviour of company management to the stakeholders. The relationship between CSR and financial performance is not easily determined; there are conceptual and practical problems to be resolved. The concept of CSR is still suffering from a shortage of strong theoretical foundations and empirical validity (Gond, 2008). Our results of the statistically significant effect of CSR disclosure on both ROE and ROA suggest that CSR disclosure directly contributes to better financial performance. Our findings are in line with Ekatah et al.'s (2011) study about the positive and statistically significant relationship between CSR and profitability of Royal Dutch Shell Plc, operating in more than 145 countries. Our results are also consistent with Flammer's (2015) findings that if a company reaches a certain level of CSR adoption, this leads to superior accounting performance (ROA and profit margin). Our results found in the cohort of large US firms that operate in many countries strengthens Scherer & Palazzo's (2011) argument for that many private firms have started to assume social and political responsibilities that go beyond legal requirements.

The interesting point in our findings is that CSR disclosure is not helpful for sale, it even tends to damage sale growth but still enhances firm's profitability (accounting performance). How could this happen? This can be explained by the fact that CSR engagement may not lead to sale growth but more benefits gained from the upstream activities of firm's supply chain than from its downstream. The gain from better output made by better staff or reduction of production and logistic costs may outweigh the possible negative counter effect of consumer

attitude toward firms' CSR engagement. Thus, we suggest that CSR should not be considered as the cost of doing business since disclosing CSR information is a good way to enhance financial performance. In brief, our findings support for Hong et al.'s (2016) claim that CSR activities are more likely to be beneficial to shareholders. CSR disclosure might create additional costs or a drop of sale due to consumers' negative attitude toward firm's CSR communication, but overall, it helps firms to improve their financial performance. Our findings suggest that CSR disclosure is not an efficient tool for sale promotion but an effective instrument for enhancement of firm's financial performance.

Our paper offers three contributions to literature. *First*, we contribute to the theoretical debate about the costs and benefits of CSR engagement by providing evidence of positive effect between CSR disclosure and firm's performance while no effect on firm's agency cost can be found. We suggest that CSR engagement was not an agency cost for shareholders but an investment for improvement of financial performance. *Second*, we extend the debate whether organizations should communicate about their CSR initiatives (Lindgreen and Swaen, 2009) by providing empirical evidence to support the view that communicating about social activities are beneficial to the communicating organisation. Although sale growth might slow down due to the possible scepticism and cynicism of consumers toward firm's CSR communication, overall this does not negatively affect firm financial performance. *Third*, to our best knowledge, this study is the first that has examined the influence of CSR disclosure on agency cost. Despite a good amount of research investigating the effect of CSR engagement on firm performance (e.g. Sen and Bhattacharya, 2001; Brown and Dacin, 1997), or the association of corporate governance instruments and agency cost (e.g. Rashid 2015, 2016), there is hardly any study examining the impact of CSR disclosure on agency cost. There are some attempts to examine the cost of CSR, such as Sprinkle and Maines (2010)

conceptualise CSR cost as accounting cost, there is little empirical evidence about if CSR engagement associates with agency cost.

For managerial implication, we recommend that a firm should engage in CSR activities and CSR communication. Consumers may be indifferent or even sceptical about the firm' CSR communication which may lead to zero or negative sale growth but this does not affect firm financial performance. Firms can be assured that CSR engagement enables them to improve financial performance, which is evidenced by our findings. We suggest that engagement in CSR activities for the sake of "window dressing" in the eyes of its customers does not help the firm to increase sale. We advise that a firm should not consider CSR as a sale promotion tool but a tool for efficiency improvement and therefore better financial performance. Efficiency improvement may arise from recruitment of good staff and cost saving in upstream supply chain activities such as logistics, procurement and production as a result of good CSR communication. We recommend that firm should disclose more information about its CSR activities as it seems that better information on environmental, social and governance aspects may enable firm to obtain higher financial performance. Our study has some limitations. We omitted some variables popularly used as control variables in corporate governance literature such as board interlocking, board diversity, ownership structure because of unavailability of the data. For financial performance, we only employed accounting performance indicators (ROE, ROA) and did not use Tobin's Q to capture firm market value in stock markets as our primary focus is on firm performance in term of firm's profitability and not the firm investors' profitability. Additionally, the two-year period of study is not long enough to capture the panel effect of the dataset. We suggest future research overcome these weaknesses. Apart from these, future research can employ data of small firms and/or use the expense ratio and the 'Q-free cash flow interaction' to proxy for agency cost to see if the results are more interesting.

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Table 1: List of variables

Variable name	Explanation	Adapted from
Variable type		
Dependent	<p><i>AUR</i></p> <p>Agency cost is proxied by assets utilisation ratio (AUR). This ratio (annual turnover/ annual total assets, measured in million US dollars) shows a loss in revenue due to inefficient asset use; this variable is the proxy for agency cost.</p>	<p>Ang <i>et al.</i> (2000); Singh and Davidson III (2003); Fleming <i>et al.</i> (2005); Florackis (2008); McKnight and Weir (2009); Henry (2010); Rashid (2015); Rashid (2016).</p>
<i>sales_growth</i>	sales growth	Greenley (1995).
<i>roe</i>	Return on equity	Greenley (1995); Rashid (2015); Rashid

(2016).

<i>roa</i>	Return on total assets	Rashid (2015); Rashid (2016).
Key independent	<i>csr_dislose</i>	Disclosure score of Aragón-Correa <i>et al.</i> (2016); environmental, social and Lai <i>et al.</i> (2016). governance information (0- 100)
Control	<i>in_director</i>	Singh and Davidson III (2003); Rashid

Table 2: Descriptive Statistics and Correlation Matrix

	Mean	S.D.	Min	Max	1	2	3	4	5	6	7	8	VIF
<i>AUR</i>	.96	.81	.04	5.40	1.00								
<i>sales_growth</i>	9.96	23.53	-82.13	431.45	.00	1.00							
<i>roe</i>	18.30	30.56	-100.65	460.03	.04	.06	1.00						
<i>roa</i>	6.15	6.41	-22.98	35.41	.17***	.12**	.51***	1.00					

<i>csr_disclose</i>	26.48	14.09	8.77	73.68	-.13***	-.03	.09*	.12**	1.00				1.19
<i>in_director</i>	81.98	12.63	.00	100.00	.01	-.07	.06	-.00	.23***	1.00			1.06
<i>leverage</i>	4.03	1.45	-6.41	10.46	-.19***	-.06	.17***	-.28***	.10*	.06	1.00		1.04
<i>employee_nu</i>	54565.42	128000.00	203.00	2100000.00	.14***	-.04	.05	.05	.14***	-.00	.05	1.00	1.11

Table 3: 2SLS Regression Outputs using Instrument Variables

	Model 1		Model 2		Model 3		Model 4	
	<i>AUR</i>		<i>sales_growth</i>		<i>roe</i>		<i>roa</i>	
	<i>Coef</i>	<i>P</i>	<i>Coef</i>	<i>P</i>	<i>Coef</i>	<i>P</i>	<i>Coef</i>	<i>P</i>
<i>csr_disclose</i>	-.000	.876	-.022	.735	.193*	P=.079	.068***	.000
	(-.16)		(-.34)		(1.75)		(3.65)	
<i>in_director</i>	.004	.144	-.104	.212	.136	.334	-.000	1.000
	(1.46)		(-1.25)		(.97)		(-.00)	
<i>leverage</i>	-.069***	.000	-1.941*	.212	4.180**	.002	-	.000
							1.862***	
	(-3.53)		(-2.53)		(3.08)		(-8.41)	
<i>market_value</i>	-.263***	.000	.978	.136	1.840	.099	.298	.116
	(-		(1.49)		(1.65)		(1.57)	
	11.68)							
<i>employee_nu</i>	.000***	.000	-.000	.110	.000	.503	.000	.239
	(8.13)		(-1.60)		(.67)		(1.18)	

_cons	3.425**	.000	17.295	.062	-35.728*	.023	8.450**	.002
	*							
	(11.91)		(1.87)		(-2.27)		(3.15)	
<i>N</i>	2125		2125		2125		2125	
<i>R</i> ²	.234		.022		.050		.172	

t statistics in parentheses

* $p < .05$, ** $p < .01$, *** $p < .001$

Model 1: *csr_disclose* is instrumented by *social_disclose* and *gov_disclose*.

Model 2, 3 and 4: *csr_disclose* is instrumented by *envi_disclose*, *social_disclose* and *gov_disclose*.